

CSL Behring Deploys Wireless Solution for Improved Safety, Precision and Reliability



“Wireless transmitters allow us to monitor our tanks on a real-time basis rather than an operator hand measuring the tank levels once a day. We can now make a much better inventory of our process liquids.”

Jeff Dabney, Senior Process Engineer at CSL Behring

Benefits

CSL Behring, a pharmaceutical company specializing in the manufacture of plasma products, relied on Honeywell’s XYR™ 5000 wireless transmitters to solve safety issues, meet compliance regulations, and increase data access and availability for improved decision making. The wireless solution enabled CSL to realize the following benefits:

- Improved employee safety by eliminating manual level monitoring
- Reduced vapor emission into the environment
- Avoided prohibitive wiring costs and reduced installation, operational and maintenance costs
- Increased reliability and data accuracy helped meet and maintain regulatory compliance
- More timely, consistent and accurate measurements



Honeywell’s XYR 5000 wireless transmitters enable CSL Behring to meet stringent regulatory requirements and reduce costs.

Background

CSL Behring is a global leader in the plasma protein biotherapeutics industry, dedicated to treating rare and serious diseases and passionate about improving the quality of life of patients throughout the world. The company recently changed its name from ZLB Behring as part of its alignment with its parent organization, CSL Limited, a specialty biopharmaceutical company.



Behring’s line of therapies include products for the treatment of hemophilia and other coagulation disorders, immunoglobulins for the prevention and treatment of immune disorders, treatments that inhibit the formation of blood clots, wound-healing agents used during major surgical procedures, and plasma expanders for the treatment of conditions such as shock, burns, and circulatory disorders.

The company had facilities in Bern, Switzerland; Marburg, Germany; and Kankakee, Illinois. The company also operates ZLB Plasma, one of the world’s largest plasma collection networks throughout the United States and Germany. CSL Behring employs more than 6,000 people in 18 countries.

Challenge

CSL's alcohol tanks sit outside rather than in an enclosed area. Employees had to walk up narrow stairways to the tops of the 50-year-old, 10,000-gallon storage tanks, which stand about 15-ft high. "We have employees walking out to these tanks in the rain and snow and whatever else," said Jeff Dabney, senior process engineer at CSL Behring's Kankakee, Illinois facility.

The intense alcohol concentration in the tanks threatened a risk of explosion and a potential safety risk for employees who would manually check the alcohol levels. Searching for a way to better monitor its alcohol tank levels and reduce safety risks, they decided to eliminate one of the cycle's most routine tasks—manual alcohol tank monitoring.

"We had a big challenge finding a level measuring system to run into our Class 1 Div 1 area that did not involve thousands of dollars in intrinsic barriers alone," Dabney said. Since the application was outside, crossing several roads, "trenching was out of the question, and large trucks are used, so this would mean a large expense in putting up an overhead conduit system. The costs of wiring prevented us from doing the project for a long time."

More Information

For more information on Honeywell's wireless solutions, visit www.honeywell.com/ps or contact your Honeywell account manager.

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Solution

Within the year, the company had implemented a wireless solution, which allowed monitoring the tanks on a real-time basis without exposing the operator to the risks of manual measurement.

CSL turned to Honeywell for a wireless solution. Honeywell is an expert in industrial wireless solutions that reduce costs, and improve safety, reliability and efficiency.

"The cost of the wiring, running 300 feet or 400 feet of cable or conduit would have been cost prohibitive," Dabney said. The wireless base now sits about 300 yards away from the storage tanks next to a cooling tower on the facility campus. Pressure transmitters sensing the weight of the alcohol in the tanks send the data to the wireless base, which then transmits the numbers to a programmable logic controller.

Employees can view the data any time on a computer screen versus manually checking levels. Also, the wireless transmitters enable the company to emit even less alcoholic vapors into the air because workers no longer have to physically open the tanks to take measurements.

Dabney's advice to other manufacturers thinking about wireless is to "do a thorough site survey when designing the location of the base unit. This was the only real challenge when installing our system," he said. "We had a cooling tower between the base unit and the sensors that was inactive when we started the install in early spring," he said. "As the weather warmed up and the cooling tower was turned on, our signal strength was a real problem. We moved the base unit to a true line of site arrangement and have not had any issues since."

XYR 5000 Wireless Transmitters are part of Honeywell's OneWireless™ suite of wireless offerings that enable automated monitoring in areas where hard-wired transmitters are too costly, difficult or time-consuming to implement.

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